ABSTRACT

[0045] A method and apparatus embeds and extracts a watermark bit-sequence in a data stream of symbols compressed using dictionary-based compression scheme with variable length indices. The embedding transmits an index value from a set of m-bit index values used to compress symbols in the data stream, identifies divisions and unused bits in the set of m-bit index values, determines a watermark bit value as either a zero-bit value or a one-bit value, transmits the index value in a one-bit watermark value range when the watermark bit value is determined to be a one-bit value and transmits the index value in a zero-bit watermark value range when the watermark bit value is determined to be a zero-bit value. Extracting the watermark reverses these operations and classifies the indices as being in either the zero-bit watermark value range or the one-bit watermark value range until the watermark is recreated.